



M125HV

High-efficiency three-phase solar inverter for large ground-mounted systems.



1500 V

High input voltage



99.1%

Peak efficiency

- Easy to install under the modules
- Separate AC wiring box for added safety
- Reactive power compensation 24/7
- 1 MPP tracker for 20 module strings
- Optional wireless communication via Sub-1G
- Arc fault and reverse polarity protection, Anti-PID function

140 kVA solar inverter

Input (DC)	M125HV
Max. input voltage	1500 V _{DC}
Operating voltage range	860 to 1500 V _{DC}
MPP voltage range	860 to 1500 V _{DC}
MPP voltage range with max. power	860 to 1450 V _{DC} ¹⁾
Nominal voltage	1050 V _{DC}
Max. current	150 A
Max. short-circuit current I _{sc}	320 A
Max. number of MPP trackers	1
Max. number of module strings per MPP tracker	20
String Fuses	20 A ²⁾ / 1500 V _{DC}
DC surge protection devices	Type 2 (EN 50539-11), replaceable, type 1 upgradeable

Output (AC)	M125HV
Max. apparent power ³⁾	140 kVA
Max. active power	125 kW ⁴⁾
Nominal apparent power ³⁾	125 kVA
Voltage range ⁵⁾	600 V -36%/+15%, 3 phases + PE (Δ)
Max. current	135 A
Frequency range ⁵⁾	50/60 Hz ± 5 Hz
Adjustment range of power factor	0.8 cap to 0.8 ind (1.0 to 0.9 at max. power)
Total harmonic distortion (THD)	< 3% at nominal apparent power
Consumption in night mode ⁶⁾	< 3.5 W
AC surge protection devices	Type 2 (EN 61463-11) replaceable; type 1 upgradeable

General Specifications	M125HV
Delta model name	M125HV_111
Peak efficiency	99.1%
Efficiency EU	98.7%
Operating temperature range	-25 to +60°C
Temperature range without power derating	-25 to +50 °C
Storage temperature range	-25 to +60°C
Relative humidity	0 to 100%, non-condensing
Max. operating altitude	4000 m (above sea level)
Topology	Without transformer
Standard warranty	5 years (warranty extension available upon request)

Mechanical design	M125HV
Dimensions (H x W x D)	900 × 663 × 334 mm
Weight	80 kg
Cooling	Replaceable fan module
Mounting options	Wall mounting ⁷⁾ , ground mounting
Disconnectors	2 mechanical DC disconnectors

Mechanical design	M125HV
Connection type AC side	Screw bolts; wire cross-section: Cu 50 to 185 mm ² , Alu 50 to 185 mm ² ; cable diameter: 24 to 51 mm (4 wires)
Connection type DC side	20 pairs of DC plugs Amphenol H4 Plus ⁸⁾

Communication	M125HV
Communication interfaces	2 x RS485, 2 x dry contacts, 1 x external power-off, 6 x digital inputs, Wi-Fi (optional), Sub-1G (optional)
Data visualization	DeltaSolar app, MyDeltaSolar Cloud
Display of operating status	3 LEDs

Safety / Standards	M125HV
Protection class	IP65
Safety class	I
Configurable trip parameters	Yes
Insulation monitoring	Yes
Overload behavior	Current limitation, power limitation
Anti-islanding protection/grid regulation	UTE C15-712, ERDF-RES-PRO_64E, VDE-AR-N 4110
EMC	EN 61000-6-2, EN 61000-6-3, EN 61000-3-11, EN 61000-3-12
Safety	IEC 62109-1/-2; CE compliance

- 1) Environmental conditions: < 0°C: 860 to 1450 VDC, < 25°C: 860 to 1350 VDC, < 40°C: 860 to 1250 VDC
- 2) The value when the internal temperature of the inverter is 25 °C. At higher internal temperatures, the value may drop to 10 A.
- 3) Cos Phi = 1 (VA = W)
- 4) The active power can be limited.
- 5) AC voltage and frequency range are programmed based on the respective country regulations.
- 6) Night-time consumption with standby communication
- 7) Mounting plate included in scope of delivery
- 8) Included in scope of delivery



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